



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/002,838 | 11/14/2001 | Marc W. Kauffman | 019396-002000US | 3646 |

20350 7590 09/08/2004

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

BUI, KIEU OANH T

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2611

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/002,838 | Applicant(s) KAUFFMAN ET AL. | |
| | Examiner KIEU-OANH T BUI | Art Unit 2611 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1&2</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

2. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Leatherbury et al. (U.S. Patent No. 6,763,025 B2/ or “Lea” hereinafter).

Regarding claim 1, Lea discloses “a method for distributing a content object over a network system” (Fig. 1, and col. 1/lines 5-12), the method comprising step of “detecting a request for the content object associated with one of a plurality of content providers coupled to a network that uses a first transport protocol”, i.e., communication medium 108 provides the user or subscriber a bi-directional communication for requesting the content object from the headend such as video-on-demand service (Fig. 1, and col. 6/lines 15-34 & col. 11/lines 1-55 as the user uses his set top box for ordering the service and the headend detects this request for service as more on col. 7/lines 38-59); “receiving the content object at a node of the network from the one of the plurality of content providers; buffering the content object at a point distant from the one of the plurality of content providers and the content receiver”, i.e., the content object is received at node 107 (Fig. 1, col. 7/lines 38-59) and then to a hub 105, within the hub 105, a channel

Art Unit: 2611

interface module 305 of Figure 4 includes external memory for data payload buffer storage at a distant point from the content providers 103 and content receivers 109 (col. 13/line 60 to col. 14/line 12); and “transporting the content object between the node and a content receiver with a second transport protocol, wherein the first transport protocol is different from the second transport protocol”, i.e., a separate upstream channel is dedicated as a first transport protocol from the user to the headend, and a second transport protocol, which is different from the first transport protocol, in any of many different formats can be used for transporting the content object from the headend or the node back to the user (col. 7/line 38 to col. 8/line 17 & col. 8/lines 48-65 for forward band and return band or upstream and downstream addressed).

As for claim 2, in further view of claim 1, Lea further discloses “wherein the buffer stores at least a portion of the content object for use by a plurality of content receivers”, i.e., data stream in packets and segments (as illustrated in Figs. 6A & 7A) and being stored at least some or all at the buffer storage (col. 13/line 60 to col. 14/line 12).

As for claim 3, in further view of claim 1, Leas further discloses “wherein the transporting step further comprises steps of selecting a channel on a conductor with multiple channels corresponding to frequency ranges” (col. 8/lines 34-60 for multiple channels according to different frequency ranges are selecting or allocated accordingly for forward band); “multiplexing a plurality of content objects into a data stream; and modulating the data stream onto a carrier frequency within the channel”, i.e., a time division multiplexing technique is used for multiplexing multiple content objects into a data stream and modulating the data stream on to a carrier frequency within the channel for transport (col. 7/line 60 to col. 8/line 33).

As for claim 4, in further view of claim 1, Lea further discloses “comprising a step of communicating to the content receiver information that indicates how to filter the content object from the incoming information”, i.e., control information on how to filter is delivered from the headend to the content receiver or the set top box at user location 108 (col. 14/line 12-64 on details on this process is done).

As for claim 5, Lea discloses “wherein the content object comprises at least one of audio data and video data” (col. 7/lines 60-63).

As for claim 6, Leas further discloses “wherein: the content object is encoded in a first format at the one of the plurality of content providers, the content object is encoded in a second format at the node, and the first format is different from the second format” (col. 6/line 46 to col. 8/line 15 for different sources, different types of transmission mediums, different formats can be used between the sources and the subscribers).

As for claim 7, Leas further discloses “wherein: the content object is encoded in at a first data rate at the one of the plurality of content providers, the content object is encoded at a second data rate at the node, and the first data rate is different from the second data rate” (col. 2/line 56 to col. 3/line 15 & col. 7/line 60 to col. 8/line 33 for different formats and different data stream rates addressed as for fixed or variable sized frames, packets or cells).

As for claim 8, Leas discloses “wherein: the content object is encoded in a first format for the first transport protocol, the content object is encoded in a second format for the second transport protocol, and the first format is different from the second format” (col. 6/line 46 to col. 8/line 15 for different sources, different types of transmission mediums, different formats can be used between the sources and the subscribers).

As for claim 9, in view of claim 1, Leas shows “wherein: the content object is encoded at a first data rate for the first transport protocol, the content object is encoded at a second data rate for the second transport protocol, and the first data rate is different from the second data rate” (col. 2/line 56 to col. 3/line 15 & col. 7/line 60 to col. 8/line 33 for different formats and different data stream rates addressed as for fixed or variable sized frames, packets or cells).

As for claim 10, Leas discloses “wherein the transporting step comprises a step of coupling the content object to at least one of a hybrid fiber/coaxial plant, a hybrid fiber/twisted pair plant and a wireless plant” (Fig. 1, and col. 1/line 15-col. 2/line 27).

As for claim 11, in view of claim 1, Leas shows “wherein the second transport protocol comprises an MPEG-2 transport protocol” (col. 4/lines 6-43).

As for claim 12, in view of claim 1, Leas discloses “wherein the second transport protocol comprises packetized content object constituents in a multiplexed data stream where the constituents are distinguished within the multiplexed data stream with program identifiers and are reconstituted into the content object in synchronization using embedded time stamps” (Fig. 6A, and col. 16/line 24 to col. 18/line 49 for details on packets with its program identifiers, synchronization using embedded time reference in pointers in using time division de-multiplexing of dedicate time windows corresponding to upstream channel slots within each physical channel).

As for claims 13 and 14, Leas discloses “wherein the network comprises an Internet protocol packet network to transport content objects separate from the Internet” and “wherein the network comprises the Internet” (Fig. 1, and col. 2/line 35 to col. 3/line 48 for the Internet and internet protocol packet network).

Regarding claims 15-19, these claims for “a content distribution system for coupling content between a content provider and a content receiver, the content distribution system comprising: a node that relays a content object that originated from the content provider; a network coupling the content provider to the node, wherein the network uses a first transport protocol; a data channel coupling the node to the content receiver, wherein content object is transported with the data channel using MPEG-2 transport protocol” with same limitations are rejected for the reasons given in the scope of claims 1-14 as already disclosed in details above.

Regarding claims 20-26, these claims for “a method for distributing a content object over a network system, the method comprising step of detecting a request for the content object associated with one of a plurality of content providers coupled to a network that uses a first transport protocol; sending the content object from one of the plurality of content providers to a cache with the network; and transporting the content object between the cache and a content receiver with a second transport protocol different from the first transport protocol”, with a cache regarding same as a buffer storage as disclosed earlier, are rejected for the reasons given in the scope of claims 1-14 as already disclosed in details above.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rodriguez et al (US Patent 6,760,918 B2 & US Pub 2003/0002862 A1) disclose a system related to video/audio content delivery service with transport up and down streams.

Art Unit: 2611

4. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant, can be reached on (703) 305-4755.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



**KRISTA BUI
PATENT EXAMINER**

Krista Bui
Art Unit 2611
August 27, 2004